Amendments to the Claims:

This listing of the claims will replace all prior versions and listings of claims in the present application:

Listing of Claims:

1-22 (cancelled)

23 (currently amended). A trans substituted oxochlorin compound of Formula X:

$$S^{1}$$
 S^{1}
 S^{1}
 S^{1}
 S^{2}
 S^{10}
 S^{3}
 S^{4}
 S^{9}
 S^{14}
 S^{13}
 S^{12}
 S^{6}
 S^{5}

wherein:

M is a metal selected from the group consisting of Zn, Mg, Pt, Pd, Sn and Al, or M is absent;

 K^1 , K^2 , K^3 , and K^4 are hetero atoms independently selected from the group consisting of N, O, S, Se, Te, and CH;

S¹, S², S³, S⁴, S⁵, S⁶, S⁸, S⁹, S¹⁰, S¹¹, S¹², and S¹⁴ are independently selected from the group consisting of H, aryl, phenyl, alkyl, cycloalkyl, spiroalkyl, alkenyl, alkynyl, halogen, alkoxy, alkylthio, perfluoroalkyl, perfluoroaryl, pyridyl, cyano, thiocyanato, nitro, amino, alkylamino, acyl, sulfoxyl, sulfonyl, imido, amido, and carbamoyl;

wherein S^7 and S^{13} are together =0;

and either S^1 and S^5 are *trans*-substituted linking groups Q^1 and Q^2 , S^2 and S^6 are *trans*-substituted linking groups Q^1 and Q^2 , S^{10} and S^{12} are *trans*-substituted linking groups Q^1 and Q^2 , or S^9 and S^{11} are *trans*-substituted linking groups Q^1 and Q^2 ; and

 \boldsymbol{Q}^1 and \boldsymbol{Q}^2 are independently selected linking groups of the formula:

$$\left(-R^1-R^2\right)_n R^3-Y$$

wherein:

n is from 0 or 1 to 5 or 10;

R³ may be present or absent;

R¹, R², and R³ are each independently selected from the group consisting of ethene, ethyne, aryl, and heteroaryl groups, which aryl and heteroaryl groups may be unsubstituted or substituted one or more times with H, aryl, phenyl, cycloalkyl, alkyl, alkenyl, alkynyl, halogen, alkoxy, alkylthio, perfluoroalkyl, perfluoroaryl, pyridyl, cyano, thiocyanato, nitro, amino, alkylamino, acyl, sulfoxyl, sulfonyl, imido, amido, and carbamoyl; and

Y is a protected or unprotected reactive substituent selected from the group consisting of hydroxy, thio, seleno, telluro, ester, carboxylic acid, boronic acid, phenol, silane, sulfonic acid, phosphonic acid, alkylthiol, formyl, halo, alkenyl, alkynyl, haloalkyl, dialkyl phosphonate, alkyl sulfonate, alkyl carboxylate, acetylacetone, and dialkyl boronate groups.

- 24 (original). The compound according to claim 23, wherein S^9 and S^{11} are *trans*-substituted linking groups Q^1 and Q^2 .
- 25 (original). The compound according to claim 23, wherein S^{10} and S^{12} are *trans*-substituted linking groups Q^1 and Q^2 .
 - 26 (original). The compound according to claim 23, wherein neither S⁸ nor S¹⁴ is H.
 - 27 (original). The compound according to claim 23, wherein M is present.
 - 28 (original). The compound according to claim 23, wherein M is Zn or Mg.
 - 29 (original). The compound according to claim 23, wherein M is absent.
- 30. The compound according to claim 23, wherein K^1 , K^2 , K^3 , and K^4 are independently selected from the group consisting of N, O, S, and CH.
- 31 (original). The compound according to claim 23, wherein K^1 , K^2 , K^3 , and K^4 are all N.
- 32 (original). The compound according to claim 23, wherein S^4 , S^7 , S^8 , S^9 , S^{10} , S^{11} , S^{12} , S^{13} , and S^{14} are all alkyl.